

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-12 (Canceled).

13. (Previously presented) An error rate estimating device for estimating an error rate of a signal when decoding a signal modulated by a plurality of transmission systems or coding rates,

said error rate estimating device provided with:

a judging means for judging a transmission system or coding rate of the signal;

a counting means for counting a number of times normalization is performed in a predetermined time period for each of the plurality of transmission systems or coding rates;

state metric calculating means for calculating a state metric,

wherein normalization is being performed while said state metric is being calculated;

an estimating means for estimating the error rate for each signal from the correspondence between the number of times of normalization and the error rate respectively determined for each different transmission system or each different coding rate based on the number of times of normalization counted by the counting means; and

a selecting means for selecting one of a plurality of error rates for each signal estimated by the estimating means.

14. (Original) An error rate estimating device as set forth in claim 13, wherein said selecting means selects the error rate according to the transmission system or the coding rate judged by the judging means.

15. (Original) An error rate estimating device as set forth in claim 13, wherein the selecting means selects an error rate to be output by comparing a plurality of error rates input with a predetermined reference value.

16. (Previously presented) An error rate estimating method for estimating an error rate of a signal when decoding a signal modulated by a plurality of transmission systems or coding rates, said error rate estimating method comprising:

a judging step of judging a transmission system or coding rate of the signal;

a counting step of counting a number of times normalization is performed in a predetermined time period, for each of the plurality of transmission systems or coding rates;

a state metric calculating step for calculating a state metric for each of the plurality of transmission systems or coding rates,

wherein normalization is being performed while said state metric is being calculated;

an estimating step of estimating the error rate for each signal from each of the plurality of transmission systems or coding rates using the number of times normalization is performed; and

a selecting step of selecting one of a plurality of error rates for each signal estimated in the estimating step.

17. (Original) An error rate estimating method as set forth in claim 16, further comprising, in said selecting step, selecting the error rate according to the transmission system or the coding rate judged by the judging step.

18. (Original) An error rate estimating method as set forth in claim 16, further comprising, in said selecting step, selecting an error rate to be output by comparing a plurality of error rates input with a predetermined reference value.

19. (Previously presented) An information recording medium for providing information for control executed by a receiver receiving a signal modulated by a plurality of transmission systems or coding rates sent through a channel, wherein said control information includes:

a judgment instruction for judging a transmission system or coding rate of the signal;

a count instruction for counting a number of times normalization is performed in a predetermined time period;

a calculation instruction for calculating a state metric;

wherein normalization is being performed while said state metric is being calculated;

an estimation instruction for estimating the error rate of the signal using the number of times normalization is performed; and

a selection instruction for selecting one of a plurality of error rates for each signal estimated in the estimating step.

20. (Currently amended) An error rate estimating device for estimating an error rate of a signal when decoding a signal modulated by a plurality of transmission systems or coding rates,

said error rate estimating device comprising:

a counting means for counting a number of times normalization is performed in a predetermined time period, for each of the plurality of transmission systems or coding rates;

state metric calculating means for calculating a state metric,

wherein normalization is being performed while said state metric is being calculated;

an estimating means for estimating the error rate for each signal from each of the plurality of transmission systems or coding rates using using the number of times normalization is performed;

a multiplying means for determining a value for multiplication with the error rate for each signal according to a value of the error rate estimated by the estimating means for a predetermined transmission system or coding rate among the transmission systems or coding rates and multiplying with that value; and

an outputting means for adding and outputting the error rate for each signal output from the multiplying means.

21. (Previously presented) An error rate estimating method for estimating an error rate of a signal when decoding a signal modulated by a plurality of transmission systems or coding rates,

said error rate estimating method comprising:

a counting step of counting the number of times normalization is performed in a predetermined time period, for each of the plurality of transmission systems or coding rates;

a state metric calculating step for calculating a state metric for each of the plurality of transmission systems or coding rates,

wherein normalization is being performed while said state metric is being calculated;

an estimating step of estimating the error rate for each signal from each of the plurality of transmission systems or coding rates using the number of times normalization is performed;

a multiplying step of determining a value for multiplication with the error rate for each signal according to a value of the error rate estimated by the estimating step for a predetermined transmission system or coding rate among the transmission systems or coding rates and multiplying with that value; and

an outputting step of adding and outputting the error rate for each signal output in the multiplying step.

22. (Currently amended) An information recording medium for providing information for control executed by a receiver receiving and decoding a signal modulated by a plurality of transmission systems or coding rates sent through a channel,

said control information including:

a count instruction for counting a number of times [[of]] normalization is performed, for each of the plurality of transmission systems or coding rates;

a calculation instruction for calculating a state metric,

wherein normalization is being performed while said state metric is being calculated;

an estimation instruction for estimating the error rate for each signal using the number of times normalization is performed;

a multiplication instruction for determining a value for multiplication with the error rate for each signal according to a value of the error rate estimated by the estimating step for a predetermined transmission system or coding rate among the transmission systems or coding rates and multiplying with that value; and

an output instruction for adding and outputting the error rate for each signal output from the multiplying step.